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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/677,217	10/03/2003	Yong-Sheng Lin	LINY3046/BEU	8589
23364	7590	04/12/2004	EXAMINER	
BACON & THOMAS, PLLC 625 SLATERS LANE FOURTH FLOOR ALEXANDRIA, VA 22314			PERKEY, WILLIAM B	
			ART UNIT	PAPER NUMBER
			2851	

DATE MAILED: 04/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/677,217

Applicant(s)

LIN, YONG-SHENG

Examiner

William B. Perkey

Art Unit

2851

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Ichihara (U.S. Patent No. 6,147,460).

Ichihara discloses a power supply 1 (a battery); a flash unit capacitor 11 (see Figs. 1,4,5); a voltage converter as element 3 or as elements 3 and 4; a square wave oscillator as elements 5 and 6; a micro control unit as control circuit 16; and a flash unit-enabling signal at the output terminal CGCOM. Thus, Ichihara fully meets claims 1 and 4. Ichihara discloses a first transistor 4 and thus fully meets claim 2. Ichihara discloses a charge-enabling control circuit as the resistor 7 in each of the embodiments of Figs. 1, 4 and 5, or as the one-shot circuit 17 in the embodiment of Fig. 4. Thus, Ichihara fully meets claim 3.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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4. Claims 5-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ichihara (U.S. Patent No. 6,147,460 as applied to claims 1 and 2 above, and further in view of Yoneya et al. (U.S. Patent No. 6,104,144).

Ichihara teaches the claimed invention, as explained above, except for a current control circuit to regulate the amount of charging current (via a second transistor), in response to a current control signal from the MCU that represents a voltage condition of the power supply. Yoneya et al. discloses, in Fig. 1 a current control circuit to control the charging current in response to a current control signal CTL. The current control circuit has transistors Q1 and Q2. The current level is switched depending on whether other circuits of the camera are operating at the time of flash charging. The voltage level of the power supply battery is inherently reduced when the other circuits are operating. Thus, it is reasonable to describe that the current control signal represents a voltage condition of the power supply. It would have been obvious to one of ordinary skill in the art, at the time of applicant's invention to provide the device of Ichihara in any one of the embodiments of Figs. 1, 4 and 5 with a current control device, as taught by Yoneya et al., in order to obtain the desirable feature of enabling operation of other camera functions during the charging up process of the flash unit. Of course it goes without saying that the control circuit 16 or MCU unit of Ichihara generates the current control signal CTL in this modification. Thus, the limitations of claims 5-7 are obvious from the teachings of the prior art considered as a whole.

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Claim Rejections - 35 USC § 112

5. Claim 6 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 6 sets forth a second transistor, but no first transistor has been claimed. Thus, applicant has not distinctly claimed his invention.

Telephone Numbers

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William B. Perkey whose telephone number is (571) 272-2126. The examiner can normally be reached on Monday-Thursday 7:00am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Russ Adams can be reached on (571) 272-2112. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



William B. Perkey
Primary Examiner
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WBP:wbp

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